The effects of biasing information and dogmatism upon witness testimony

DAVID E. HATTON and JOHN R. SNORTUM*
Claremont Men's College, Claremont, Calif. 91711
and

STUART OSKAMP, Claremont Graduate School, Claremont, Calif. 91711

After seeing a film of a pedestrian-and-automobile accident, college males were assigned to one of three conditions, with 30 Ss per group. One group received biasing information in favor of the driver and against the pedestrian, and a second group was biased in the reverse direction. These groups differed from unbiased controls in the inferences drawn but not in the facts remembered from the film. There was no evidence that dogmatic Ss were more confident of their answers or more susceptible to biasing information.

In spite of conscientious efforts to promote courtroom objectivity, experimental evidence suggests that judicial proceedings remain vulnerable to extraneous influence in a number of ways (Erlanger, 1970). Landy & Aronson (1969) found that simulated jurors varied the severity of sentences imposed for a crime as a function of the relative attractiveness or unattractiveness of the victim and defendant. Stone (1969) reported that jurors tended to return a final verdict which was the same as their initial impression, even though later evidence had been introduced to contravene the earlier testimony upon which the impression was based. In a study of witness testimony (Marshall, 1966), Ss saw a film showing the erratic and suspicious behavior of a boy near a baby carriage. In this instance, biasing information had little effect, for Ss who had been told that the boy had two previous arrests for child molesting did not differ significantly from unbiased Ss in the amount of correct recall or in the inferences made about the incident. While the Marshall study compared the effects of a negative bias and a neutral set, much litigation involves the clash of adversaries in which each attorney attempts to characterize the opposing client in sinister terms and, at the same time, tries to establish the sterling qualities of his own client. In the present investigation, we tested the hypothesis that sharply contrasting characterizations of the defendant, victim, and outcome will produce witness distortions of fact and inference which are consistent with the biasing information.

Dogmatic individuals have been found to demonstrate lower recall of inconsistent information and to place more positive evaluations on

consistent information than do other Ss (Kleck & Wheaton, 1969). Therefore, it was predicted in this experiment that high scorers on the dogmatism scale (Rokeach, 1960) would show greater susceptibility to biasing information and would place greater confidence in their answers than would low scorers.

METHOD

Volunteer Ss (90 undergraduate males) reported to the laboratory and were told that they would see a film but were given no instructions about the nature of the film or the purpose of the experiment. The film¹ begins with the routine activities of a grocery store parking lot, but soon shifts to dramatic action when a woman is knocked down by a car that is backing out of a parking space. In the confusion that ensues, there is a brief scuffle between the woman's male companion and the male driver of the car. After the film, Ss were exposed to one of three sets of experimental conditions, with 30 Ss per group. In the antidriver instructional set, Ss were told that the driver had a record of four recent traffic citations and was once arrested for assault. The woman was described as the mother of two children, who had stopped to buy groceries after her tour of duty as a volunteer at a nearby children's hospital. She is charging the man with reckless driving and is suing for damages incurred for minor surgery on her left leg and for diffuse uncorrected pain in the lower spinal area. In the antivictim bias, Ss were told that, 18 months prior to this incident, the woman had been in a two-car accident and had pressed a court claim for whiplash injury, but this suit was later dropped because of failure to find medical substantiation for her claim. The man was described as the father of two children, who was just returning from some extra office work at a nearby school for the retarded, where he was employed as a social worker. Control Ss received no biasing information.

Next in the sequence of events, Ss were administered the digit-retention subtest from the Wechsler Memory Scale, Form II (Stone & Wechsler, 1948), in order to provide a slight distraction and time lapse before answering questions about the film. Witness reports were obtained by a true-false questionnaire containing 56 items. In addition to indicating the truth or falsity of each statement, Ss rated the degree of confidence in their answers on a 4-step scale: not at all sure, somewhat uncertain, almost sure, and highly certain. To simplify the computation of results, each item was scored on an 8-point scale. An item marked "false, highly certain" was scored 1 point, and the response of "true, highly certain" was assigned 8 points. Questions were classified "antidriver" if agreement with the item would be favorable to the legal suit pressed by the woman and "antivictim" if agreement would suggest that the driver should not be held responsible for the accident. There were six antidriver inferences and six antivictim inferences in the questionnaire. (Antidriver inference: "The driver seemed anxious to leave the scene immediately after the accident." Antivictim inference: "We cannot rule out the possibility that the woman intentionally walked into the backing car in order to sue for damages.") There were also six antidriver fact questions and six antivictim fact questions. Four in each set were objectively false and two were objectively true. (A false antidriver fact: "After the accident, the woman's leg was bleeding slightly, just above the knee." A false antivictim fact: "When the driver tried to help the woman to her feet, she angrily pulled her arm away from him.") The remaining fact and inference items concerning the film were neutral in content and could not be directly related to the case made either for the prosecution or the defense. Before leaving the laboratory, the S completed the dogmatism scale, Form E (Rokeach, 1960), and gave his own judgment whether he would find the driver guilty or not guilty of reckless driving.

RESULTS

Figure 1 shows the mean rating assigned by the antivictim, antidriver, and control groups to the antivictim and antidriver fact and inference questions. In interpreting this graph, bear in mind that the higher a score falls above a rating of 4.5 (on an 8-point scale), the greater is the average confidence of Ss that a given type of item is true, and the further that a score falls below 4.5, the greater is the average confidence that a given type of item is false.

In applying a two-factor

*Reprints may be obtained from the second author at Claremont Men's College, Claremont, Calif. 91711.

Fig. 1. Mean confidence rating assigned by antivictim, antidriver, and control groups on antivictim and antidriver fact and inference questions.

mixed-design analysis of variance (Bruning & Kintz, 1968) to inference ratings, it was found that the groups differed significantly ($F = 3.47$, $df = 2/87$, $p < .05$). An F test for simple effects revealed that this difference was attributable to the fact that antidriver Ss responded with significantly lower mean ratings than did the other two groups ($p < .05$). The mean rating given to antivictim inferences was higher than that assigned to antidriver inferences ($F = 154.64$, $df = 1/87$, $p < .001$), and the significant interaction ($F = 59.67$, $df = 2/87$, $p < .001$) indicated differentiated response patterns of the three groups to the antivictim and antidriver content of the inferences. A separate analysis of the antivictim inferences showed significant group effects ($F = 39.31$, $df = 2/87$, $p < .001$), and multiple t tests demonstrated that all group means differed significantly from each other ($p < .001$). Likewise, significant group differences were found in a separate analysis of antidriver inferences ($F = 7.68$, $df = 2/87$, $p < .005$); further t tests showed that the antivictim group was significantly lower than the control and antidriver groups ($p < .01$), but the antidriver

and control group means did not differ significantly from each other.

In the analysis of variance applied to the fact questions, there were no significant differences between groups on either antivictim or antidriver items. However, as is apparent in Fig. 1, there was considerably higher agreement with the antivictim questions than with the antidriver questions ($F = 227.85$, $df = 1/87$, $p < .001$).

To appraise the validity of the confidence ratings, the mean rating (on a 4-point scale) given by each S to neutral fact questions answered correctly was compared with those answered incorrectly. Three Ss made no errors and were excluded from this comparison. The mean rating for correct answers was 3.27, and this was significantly higher than the mean of 2.63 for incorrect answers ($t = 7.79$, $df = 86$, $p < .001$). There was no significant relationship between dogmatism score and degree of confidence in either correct ($r = .13$) or incorrect ($r = .04$) answers. Considering only the 60 Ss in the two bias groups, there appeared to be no significant tendency for Ss who were above the median on the dogmatism scale to score above the median in a

biased direction on fact and inference items.

At the conclusion of the experiment, 15 antivictim Ss, 19 antidriver Ss, and 20 control Ss felt that the driver was guilty of reckless driving. Two control Ss abstained. The group of 54 Ss who supported the guilty verdict were compared with the 34 Ss who thought the driver was innocent. Those who regarded the driver as innocent were in significantly greater agreement with the antivictim inferences than were those Ss who felt that he was guilty ($t = 3.18$, $df = 86$, $p < .001$), but these groups were not differentiated on the other inference questions or on the fact questions.

DISCUSSION

As should be expected if perception tends to be accurate, higher ratings of confidence were assigned to neutral fact items answered correctly than to those answered incorrectly. There was no evidence that dogmatic Ss placed more confidence in their answers and no support for the hypothesis that dogmatic Ss would be more likely to reconstruct events of the accident in a pattern to fit the biasing information. Ss generally registered stronger agreement with antivictim statements than with antidriver statements. In the absence of a female comparison group, it cannot be discerned whether this reflects male chauvinism (in response to a male driver and female victim) or whether the antivictim statements were merely more salient and persuasive. In either case, this imbalance would not impair a test of the experimental hypotheses because control Ss provided a base level for male responses.

In view of the high level of endorsement of antivictim fact and inference items, it was surprising to note that 60% of the Ss judged the man guilty of reckless driving. The Ss who found him innocent were more strongly committed to inferences attributing careless actions and questionable motives to the woman. In contrast, those Ss with a lower level of confidence in antivictim inferences may have been more responsive to factors outside of the film in making their judgments. For example, the principle of "pedestrian right-of-way" (strongly established in California, where the study was done) would require that responsibility for the accident be shifted to the driver, in spite of any evidence concerning carelessness by the woman.

The Ss receiving favorable information about the driver and unfavorable information about the victim demonstrated stronger agreement with antivictim inferences and greater disagreement with antidriver inferences than did control

Ss. Ss given the reverse pattern of biasing information (antidriver and provictim) showed lower agreement with antivictim inferences than control Ss but were not differentiated from controls on antidriver inferences. Statements involving observable facts seemed remarkably impervious to subjective distortion due to biasing information. However, it is quite possible that less intelligent Ss and a longer delay between film and questionnaire might have yielded a greater impact of bias upon items of fact. In addition, there may be less opportunity for the operation of bias with laboratory Ss, who view a film in relative detachment, than would be true of emotionally aroused witnesses amidst the chaos of an actual accident. The three experimental groups did not differ significantly in readiness to convict the defendant of reckless driving. These findings generally support the notion that if there is strict adherence to judicial procedures which limit witness testimony to direct observations, the effects of observer bias may be held within tolerable limits.

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NOTE

1. The film was produced by Stuart Oskamp, Kent Marquis, and James Marshall for research conducted at the University of Michigan.

Helping behavior: The cry for help

DOROTHY YAKIMOVICH* and ELI SALTZ
Center for the Study of Cognitive Processes
Wayne State University Detroit, Mich. 48202

If an "injured" workman called out for help, 81% of the college Ss helped him. If the workman groaned in pain but did not call out, only 29% helped. The difference was significant and could not be accounted for by differences in judgments of amount of pain felt by the workman in the two conditions.

Several years ago, Kitty Genovese was stabbed to death while 38 "nice," middle-class people silently watched her die (Rosenthal, 1964). The event led to a great deal of interest, among social scientists, in the general problem of the circumstances in which one person will help another who is in distress. Milgram (1970) has shown that "nonhelping" is more common in cities than in small towns, and has attributed this to the "social anonymity" and "stimulus overload" conditions inherent in big city life. Latané & Darley (1969) have demonstrated that people in groups are less likely to help others than are people alone, and have suggested the construct of "responsibility diffusion"

as a basis for this nonhelping behavior.

Summarizing the above factors which inhibit helping behavior, Latané & Darley (1970) have hypothesized that the observer from whom help is required must perceive the situation to be a true emergency in order for him to help. If other people are near the person in distress, the observer will be less likely to perceive the situation as absolutely requiring his intervention. Moreover, Latané and Darley suggest that if the observer can dismiss the situation as noncrucial, the chances are good that he will not help, even if he is the only other person present.

The present study was originally designed to test the Latané-Darley suggestion that the likelihood of helping behavior will increase as a function of the degree of distress of the victim. No danger accrued to the observer if he helped, since the victim was ostensibly an employee of the University who had injured himself by

falling off a ladder while washing windows. (As shall be seen, it now appears that the critical independent variable which determined helping behavior was *not* degree of distress, but was verbal control by the victim over helping behavior.)

A second aspect of the study was an examination of certain differences in personality and values between observers who helped a person in distress and those who did not.

METHOD

The Ss in the main experiment were 33 male college students enrolled in introductory psychology at Wayne State University during the summer of 1970. All Ss participated in the experiment as part of the course requirement. Assignment to conditions was random, with 17 Ss in the no-verbalization condition and 16 in the verbalization condition. An attractive female coed served as the E. An additional eight Ss were used as judges for the study; these were all graduate students who volunteered to help in the experiment.

The experimental room was located on the second floor of an old building in an isolated corner of the campus. While S knew that other persons were in the building somewhere, the wing in which the experiment was conducted was deserted. Each S was tested individually. He was told that the purpose of the experiment was to investigate the values of college students, and was asked to complete a "social values questionnaire," which, S was told, constituted the entire experiment. This questionnaire measured the personality and value dimensions which were later related to helping behavior.

When S started the questionnaire, E indicated that she was going to the next room so that S could work undisturbed. The S could be observed through a one-way mirror. When S began the last page of the questionnaire, E signaled a confederate to enact the emergency scene.

The confederate was dressed as a workman and was washing the first-floor windows beneath the open window of the experimental room. At E's signal, the confederate knocked over his ladder and pail, screamed, and lay down on the pavement, clutching his ankle. (The S was seated away from the window; thus S was never in a position where he could observe the actual "fall.") The no-verbalization condition was assumed, a priori, to be the low emergency situation; here the confederate continued to moan and clutch his foot, occasionally cursing softly, but never actually called for help. The verbalization condition (assumed to be high-emergency) was identical to the no-verbalization, with

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